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	Application Number	Not Assigned <i>10699210</i>
	Filing Date	31 October 2003
	First Named Inventor	BINTORO, Jemmy
Group Art Unit	Not Assigned	
Examiner Name	Not Assigned	
Attorney Docket Number	GTRC132	
Total Number of Pages in This Submission		

ENCLOSURES (check all that apply)

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Remarks:**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Troutman Sanders, LLP Ryan A. Schneider, Reg. No. 45,083	
Signature		
Date	23 February 2004	

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

BINTORO, Jemmy et al

Serial Number: Not Assigned

Filed: 31 October 2003

For: **SINGLE SUBSTRATE**
ELECTROMAGNETIC ACTUATOR

Group Art Unit.: Not Assigned

Examiner: Not Assigned

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT (IDS)
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Sir:

In accordance with the continuing duty under 37 C.F.R. §1.56 to disclose to the United States Patent and Trademark Office any information that may be material to patentability of the above-identified invention, Applicant hereby submits an *Information Disclosure Statement* listing references presently known to Applicant relating to the above-identified application. Copies of the non-U.S. patent references are also included. The submission of this information shall not be deemed an admission that this information is necessarily material to the patentability of the above-identified application.

No fee is believed to be payable in connection with the filing of this *Information Disclosure Statement* as it is submitted prior to a *First Office Action*. Nonetheless, if a fee is required for entrance of this art, authorization to charge such fees due to deposit account 20-1507 is hereby given.

Respectfully submitted,

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Sheet	1	of	4
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Application Number	Not Assigned
Filing Date	31 October 2003
First Named Inventor	BINTORO, Jemmy
Group Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	GTRC132

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

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Sheet 2 of 4

Application Number	Not Assigned
Filing Date	31 October 2003
First Named Inventor	BINTORO, Jemmy
Group Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	GTRC132

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published.	T ¹
		S. BOHM et al., A micromachined silicon valve driven by a miniature bi-stable electro-magnetic actuator, Sensors and Actuators 80 (2000) 77-83	
		YASUHIKO SHINOZAWA et al., A Proportional Microvalve Using a Bi-Stable Magnetic Actuator Jan. 1997 /BR/	
		MIRCEA CAPANU et al., Design, Fabrication, and Testing of a Bistable Electromagnetically Actuated Microvalve, Journal of Microelectromechanical Systems, Vol. 9, No. 2, June 2000	
		A. MECKES et al., Microfluidic system for the integration and cyclic operation of gas sensors, Sensors and Actuators 76 (1999) 478-483	
		HYOUNG J. CHO et al., A Bidirectional Magnetic Microactuator Using Electroplated Permanent Magnet Arrays, Journal of Microelectromechanical Systems, Vol. 11, No. 1, February 2002	
		T. LISEK et al., Thermally Driven Microvalve with Buckling Behavior for Pneumatic Applications, Sensors and Materials, Vol. 8, No. 5 (1996)	
		EDWIN T. CARLEN et al., Surface Micromachined Paraffin-Actuated Microvalve, Journal of Microelectromechanical Systems, Vol. 11, No. 5, October 2002	
		I. CHAKRABORTY et al., MEMS micro-valve for space applications, Sensors and Actuators 83 (2000) 188-193	
		DAVID S. ROBERTS et al., A Piezoelectric Microvalve for Compact High-Frequency, High-Differential Pressure Hydraulic Micropumping Systems, Journal of Microelectromechanical Systems, Vol. 12, No. 1, February 2003	
		PH. DUBOIS et al., Electrostatically Actuated Gas Microvalve based on a Ta-Si-N Membrane Jan. 2001 /BR/	

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Sheet 3 of 4

Application Number	Not Assigned
Filing Date	31 October 2003
First Named Inventor	BINTORO, Jemmy
Group Art Unit	Not Assigned
Examiner Name	Not Assigned
Attorney Docket Number	GTRC132

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published.	T ²
		M. KOHL et al., Development of stress-optimised shape memory microvalves, Sensors and Actuators 72 (1999) 243-250	
		J. HAJI-BABAEI et al., Integrable Active Microvalve with Surface Micromachined Curled-Up Actuator June 1997 /BR/	
		NELSIMAR VANDELLI et al., Development of a MEMS Microvalve Array for Fluid Flow Control, Journal of Microelectromechanical Systems, Vol. 7, No. 4, December 1998	
		LEVENT YOBAS et al., A Novel Bulk-Micromachined Electrostatic Microvalve with a Curved-Compliant Structure Applicable for a Pneumatic Tactile Display June 2001 /BR/	
		CHARLES GROSJEAN et al., A Practical Thermopneumatic Valve Jan. 1999 /BR/	
		W.K. SCHOMBURG et al., Design optimization of bistable microdiaphragm valves, Sensors and Actuators A 64 (1998) 259-264	
		COLLIN A. RICH et al., A High-Flow Thermopneumatic Microvalve With Improved Efficiency and Integrated State Sensing, Journal of Microelectromechanical Systems, Vol. 12, No. 2, April 2003	
		S. MESSNER et al., A Normally-Closed, Bimetallically Actuated 3-Way Microvalve for Pneumatic Applications Jan. 1998 /BR/	
		ANTONIO BALDI et al., A Hydrogel-Actuated Smart Microvalve with a Porous Diffusion Barrier Back-Plate for Active Flow Control Jan. 2002 /BR/	
		ROBIN H. LIU et al., Fabrication and Characterization of Hydrogel-Based Microvalves, Journal of Microelectromechanical Systems, Vol. 11, No. 1, February 2002	

Examiner Signature	/Bernard Rojas/	Date Considered	09/17/2008
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

6

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4

Application Number

Not Assigned

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31 October 2003

First Named Inventor

BINTORO, Jemmy

Group Art Unit

Not Assigned

Examiner Name _____

Not Assigned

Attorney Docket Number

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